Recombinant human Glutathione S-transferase mu 3/GSTM3 protein

Catalog Number: ATGP1463

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-225aa

UniProt No.
P21266

NCBI Accession No.
NP_000840

Alternative Names
Glutathione S-transferase mu 3, GST5, GSTB, GSTM3-3, GTM3

PRODUCT SPECIFICATION

Molecular Weight
29.1 kDa (249aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl

Purity
> 95% by SDS-PAGE

Biological Activity
Specific activity is > 15,000pmol/min/ug, and is defined as the amount of enzyme that conjugate 1.0 u mole of 1-chloro-2,4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25C.

Tag
His-Tag

Application
SDS-PAGE, Enzyme Activity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
Glutathione S-transferase mu 3, also known as GSTM3, is member of the glutathione s-transferase (GST) family of proteins. There are eight families of GST proteins, namely alpha, kappa, mu, omega, pi, sigma, theta and zeta, each of which is composed of proteins that have a variety of functions throughout the cell. The mu class of

Recombinant human Glutathione S-transferase mu 3/GSTM3 protein

Catalog Number: ATGP1463

enzymes functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. Recombinant human GSTM3 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

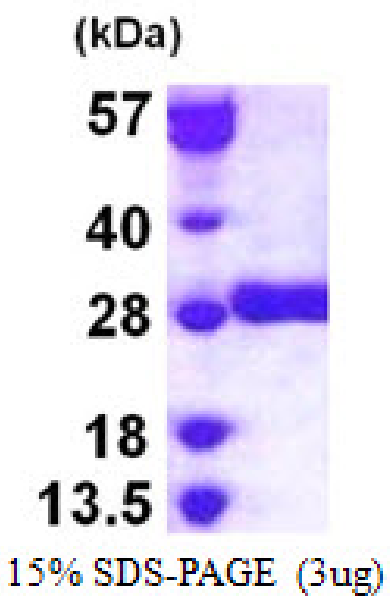
MGSSHHHHHH SSGLVPRGSH MGSHMSCESS MVLGYWDIRG LAHAIRLLLE FTDTSYEEKR YTCGEAPDYD RSQWLDVKFK LDLDFPNLPY LLDGKNKITQ SNAILRYIAR KHNMCGETEE EKIRVDIIEN QVMDFRTQLI RLCYSSDHEK LKPQYLEELP GQLKQFSMFL GKFSWFAGEK LTFVDFLTYD ILDQNRIFDP KCLDEFPNLK AFMCRFEALE KIAAYLQSDQ FCKMPINNKM AQWGNKPVC

General References

Boqaards JJ., et al. (1992) Biochem J. 289(2):383-8.
Rozell B., et al. (1992) Xenobiotica. 23(8):835-49.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.